

## ABSTRACT

Methods, compositions and articles of manufacture for assaying a sample for a target polynucleotide and/or an amplification product therefrom are provided. The methods comprise contacting a sample suspected of containing the target polynucleotide with a polynucleotide that can bind specifically thereto; this polynucleotide is conjugated to a substrate, preferably an encoded bead conjugate. An amplification reaction can first be used to produce the amplification product from the target polynucleotide so that it can be used to indirectly assay for the target polynucleotide. An amplification product detection complex and method of forming the same are also provided. The methods are particularly useful in multiplex settings where a plurality of targets are present. Amplification product assay complexes and amplification product assay arrays are also provided, along with methods of forming the same. Kits comprising reagents for performing such methods are also provided.